

Syntax 2

Homework 3: Movement

Due 11/10

Dustin A. Chacón

October 14, 2017

Note: This homework has 115 possible points, but it will be graded out of 100. If you answer each question correctly, you will get a 115%.

1 Copy Theory of Movement

In GB, movement leaves behind a “trace”, a silent anaphor that must be bound by its antecedent. Traces are motivated by the “Projection Principle”, which says that all information encoded at D-Structure must be encoded at S-Structure, and all information at S-Structure must be encoded at LF and PF:

(1) **Who_i** did Dale meet *t_i*

In essence, the trace in (1) allows later stages of the derivation (importantly, LF) to “remember” that *who* is the theme of the verb *meet*.

In Minimalism, we replace traces with lower copies:

(2) **Who** did Dale meet **who**

At LF, this sentence is represented as *Who did Dale meet who*, which translates into the intended semantics¹. At PF, there must be a rule that deletes the lower copy, which yields the correct phonological representation of the sentence.

A.) (5 points). Explain how the copy theory of movement still satisfies the projection principle.

Next, let’s examine the following sentence. Here, I mark the lower copy with *e*:

(3) Dale wondered [_{CP} which picture of herself_i] Leland said that Laura_j had taken *e*

B.) (5 points). Give the LF representation of this sentence. You can use brackets. What’s in *e*?

¹For our purposes, the semantics is something like *for which x, Dale met x*.

C.) (5 points). Using the copy theory of movement, explain why this sentence is grammatical. Specifically, state how Principle A is satisfied. (**Hint:** Remember, the LF and PF representations don't have to match!)

D.) (5 points) Now, explain why the sentence below is ungrammatical, i.e., why it violates Principle B:

(4) Dale wondered [_{CP} which picture of her_i] Leland said that Laura_i had taken *e*

By now, you should be noticing a pattern with respect to *e*, and how it is represented at LF. With that generalization in mind, examine the following sentence:

(5) Dale wondered [_{CP} which picture of Laura_i] Leland said that she_i had taken *e*

E.) (5 points) This sentence is grammatical, i.e., Principle C is not violated here. Give the LF representation of this sentence, in which Principle C is not violated.

F.) (10 points) Given your explanation for questions B and D, is your answer to E surprising? Explain whether it's surprising. How might you explain the differences?

2 Triggering Movement

Previously, we've seen that DPs can move to a higher clause to check/get Case, if they can't check/get Case in the clause that they originate in:

- (6) a. Dale_[NOM] seems [_{TP} ~~Dale~~_[NOM] to be happy]
b. Dale_[NOM] is believed [_{TP} to have been attacked ~~Dale~~_[NOM]]

However, we have not discussed these kinds of sentences with multiple clauses, as below:

(7) Dale is believed [_{TP} to seem [_{TP} to be a brilliant FBI agent]]

Let's consider two hypotheses for this derivation. On **Hypothesis A**, Dale moves straight to the matrix Spec,TP to check nominative Case. On **Hypothesis B**, Dale first moves to the intermediate Spec,TP, and then it moves from this position to the higher Spec,TP. The representations for the sentence on these two hypotheses are given below:

- (8) a. Dale is believed [_{TP} to seem [_{TP} Dale to be a brilliant FBI agent]]
b. Dale is believed [_{TP} Dale to seem [_{TP} Dale to be a brilliant FBI agent]]

G.) (10 points). Examine the following grammatical sentence. Use this data point to choose between Hypothesis A and Hypothesis B. (**Hint:** How is Principle A satisfied in this sentence? Which hypothesis predicts that the anaphor can be bound?)

(9) Dale_i is believed to seem to himself_i to be a brilliant FBI agent

In class, we've examined several different ways to think about movement. One specific proposal was **Greed**, which postulates that phrases move to check their own features (e.g., DPs move to

check their Case feature). We explored alternatives to Greed in class, including Enlightened Self-Interest and Attract/Agree. For now, let's just focus on Greed.

H.) (10 points). Does the data point in (9) support or contradict Greed? Explain your answer. (**Hint:** Why does *Dale* move to the locations that you postulate it moves to? Remember that finite T^0 can check nominative Case, but non-finite T^0 does not.)

Next, examine the following sentences:

- (10) a. It seems that [_{CP} [_{TP} Dale is a brilliant FBI agent]]
b. *Dale seems that [_{CP} [_{TP} Dale is a brilliant FBI agent]]

I.) (10 points). For this answer, let's assume that Greed is the right theory for explaining DP movement, your answer to question **H** notwithstanding. How might we explain the ungrammaticality of (10-b)?

We have explored the problems with Greed, and examined a couple of different alternatives – Attract/Agree and Enlightened Self-Interest, which argues that the target of movement triggers movement, not the moving phrase itself. On the face of it, these theories do not easily account for the facts in (10), since the main clause T^0 should be able to Attract and/or Agree *Dale* and move it to the main clause Spec,TP position. However, we see that this sentence is ungrammatical.

J.) (5 points). How might we alter our theory of Attract/Agree in order to explain the facts in (10)?

3 Superiority

Next, let's turn our attention to *wh*-movement. In general, the *wh*-phrase that starts higher in the clause must move up to Spec,CP, and the other *wh*-phrase must stay *in-situ*:

- (11) a. [_{CP} Who [_{TP} who likes who]]?
b. *[_{CP} What did [_{TP} who like who]]?

K.) (10 points) This is quite difficult to explain using Greed. On a Greed analysis, both *wh*-phrases would need to check their *wh*-feature, so it's unclear why the higher one has to move, but the lower one has to stay *in-situ*. However, this is easier to explain on an Attract analysis. Tell me how Attract can explain the pattern of facts in (11). Full credit for this problem requires explaining why the grammatical sentence is grammatical, and the ungrammatical sentence is ungrammatical.

Now, examine the following pair of sentences:

- (12) a. Which agent likes which waitress?
b. Which waitress does which agent like?

L.) (10 points) *wh*-phrases headed by *which* ("D-linked" phrases) do not seem to exhibit superiority effects. That is, these sentences are both grammatical. According to your analysis in **K**, is

this surprising? How might you amend your analysis to explain why both sentences in (12) are acceptable?

Next, let's examine these two sentences:

- (13) a. *What did who give to Margaret?
b. What did who give to whom?

(M.) (10 points) Are the facts above surprising? Explain your answer. How might we amend our analysis to accommodate these facts?

N.) (5 points) Finally, examine the following sentence. Given everything you've said so far, is the ungrammaticality of this sentence surprising? Explain why.

- (14) *Who left why?

O.) (10 points) Ask me any question you have about the readings or materials in class.